O. A. 1

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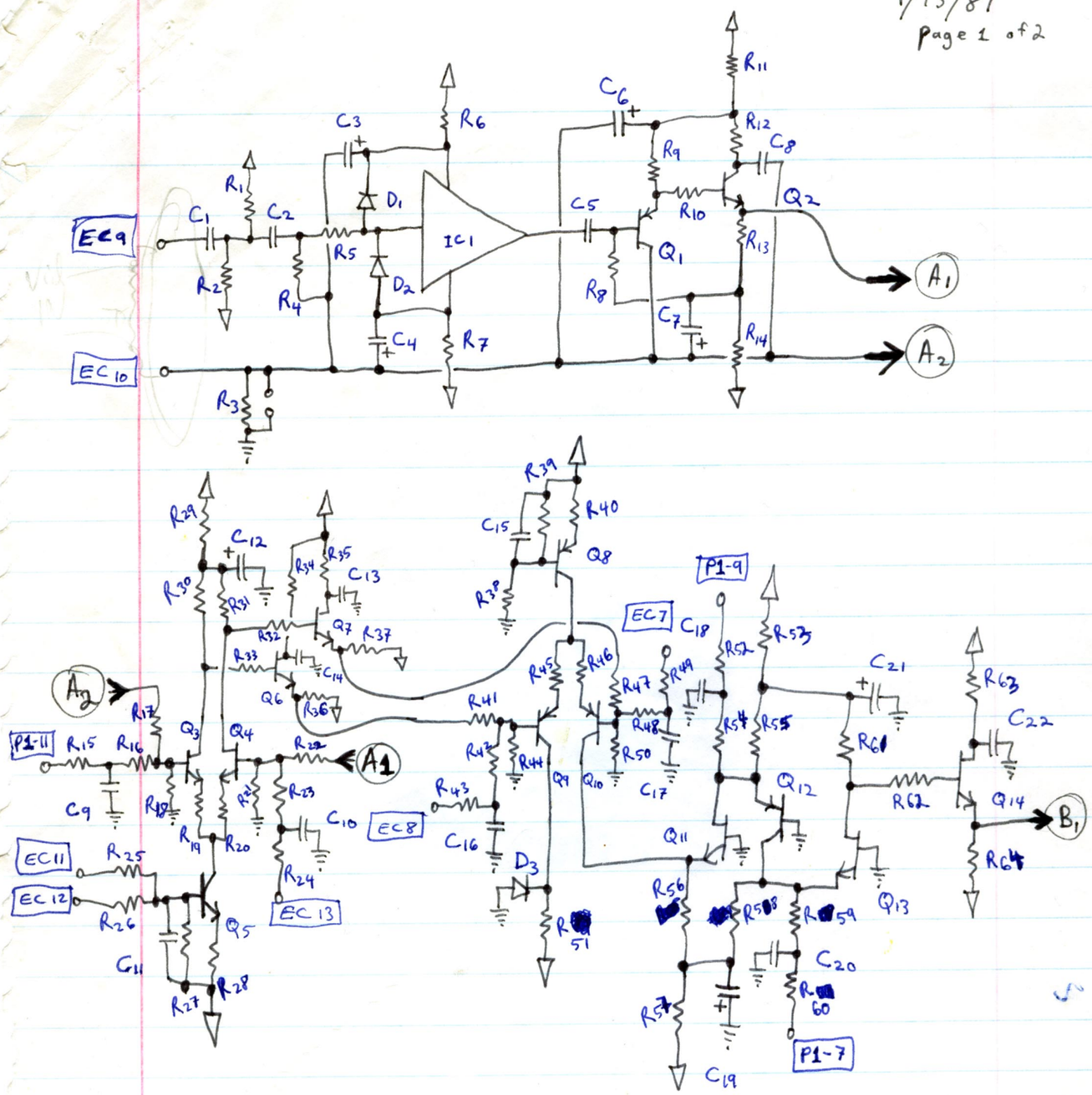
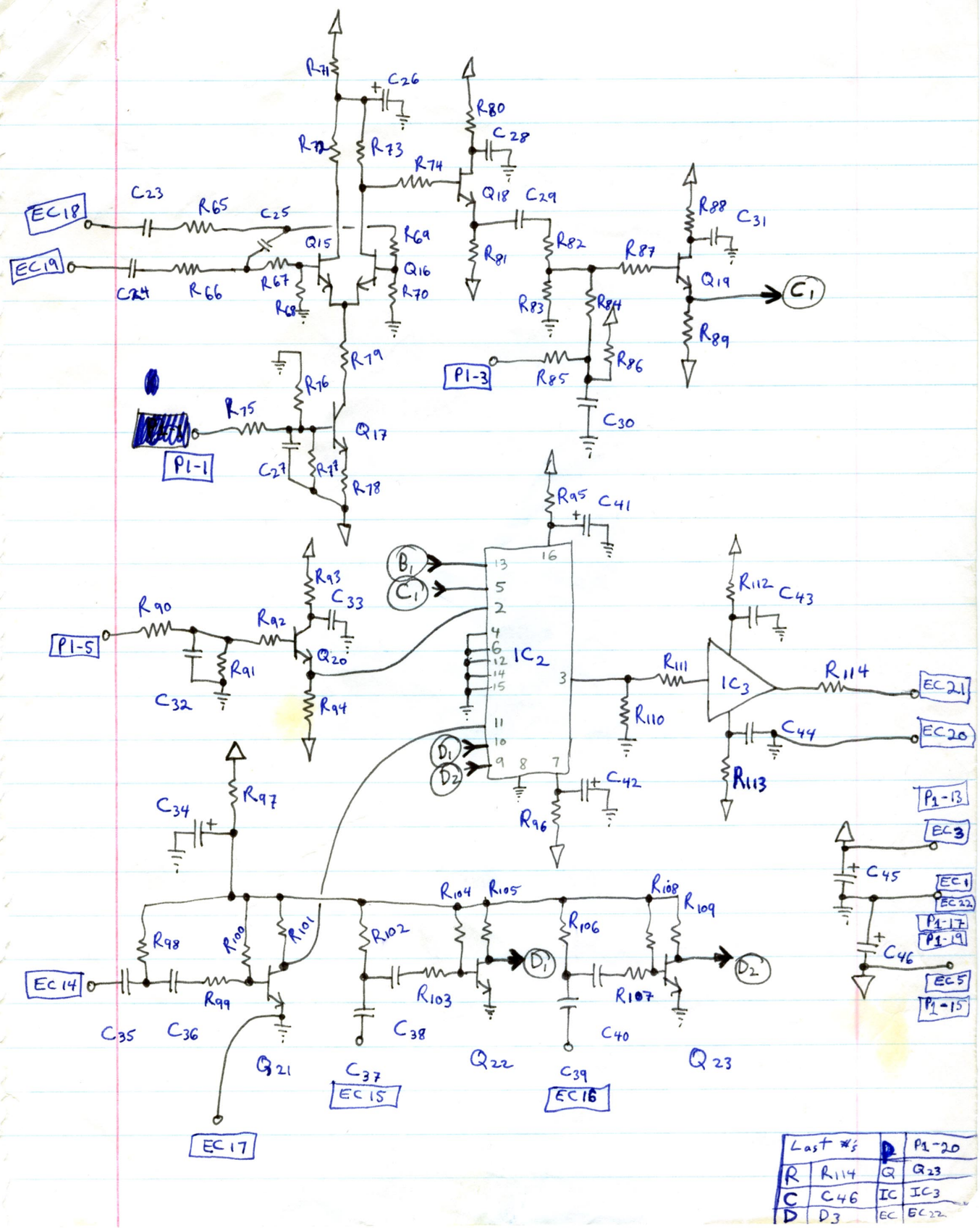


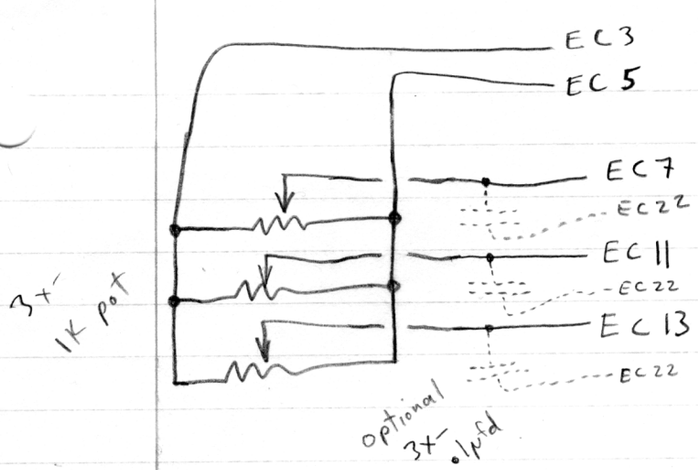
↑ = +5 v

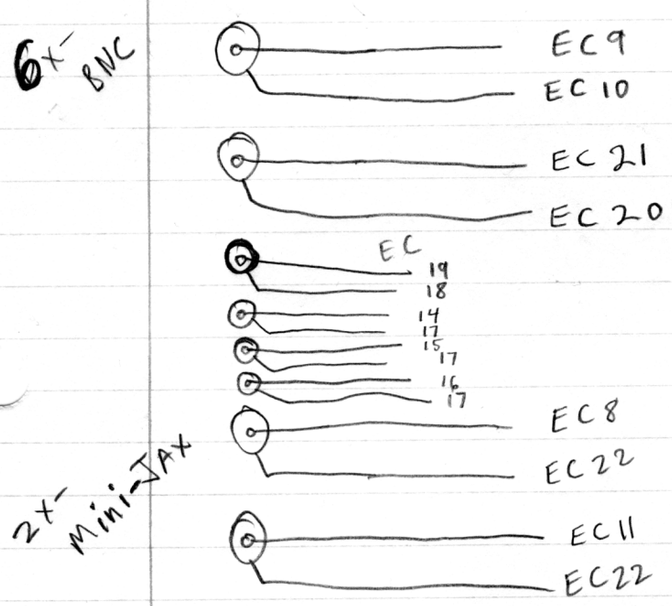
↓ = −5 v

⏚ = ground (0 v)

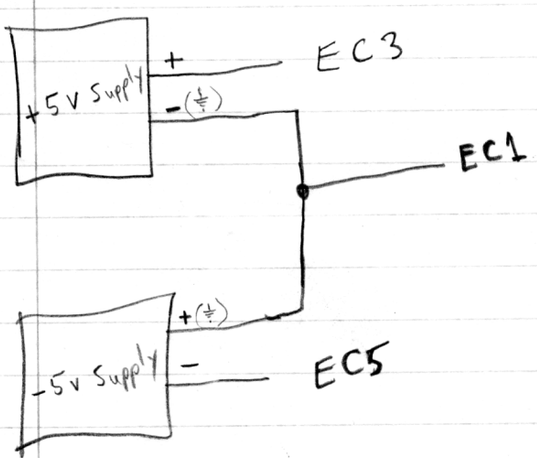


Last #'s		P	P1-20
R	R114	Q	Q23
C	C46	IC	IC3
D	D3	EC	EC22

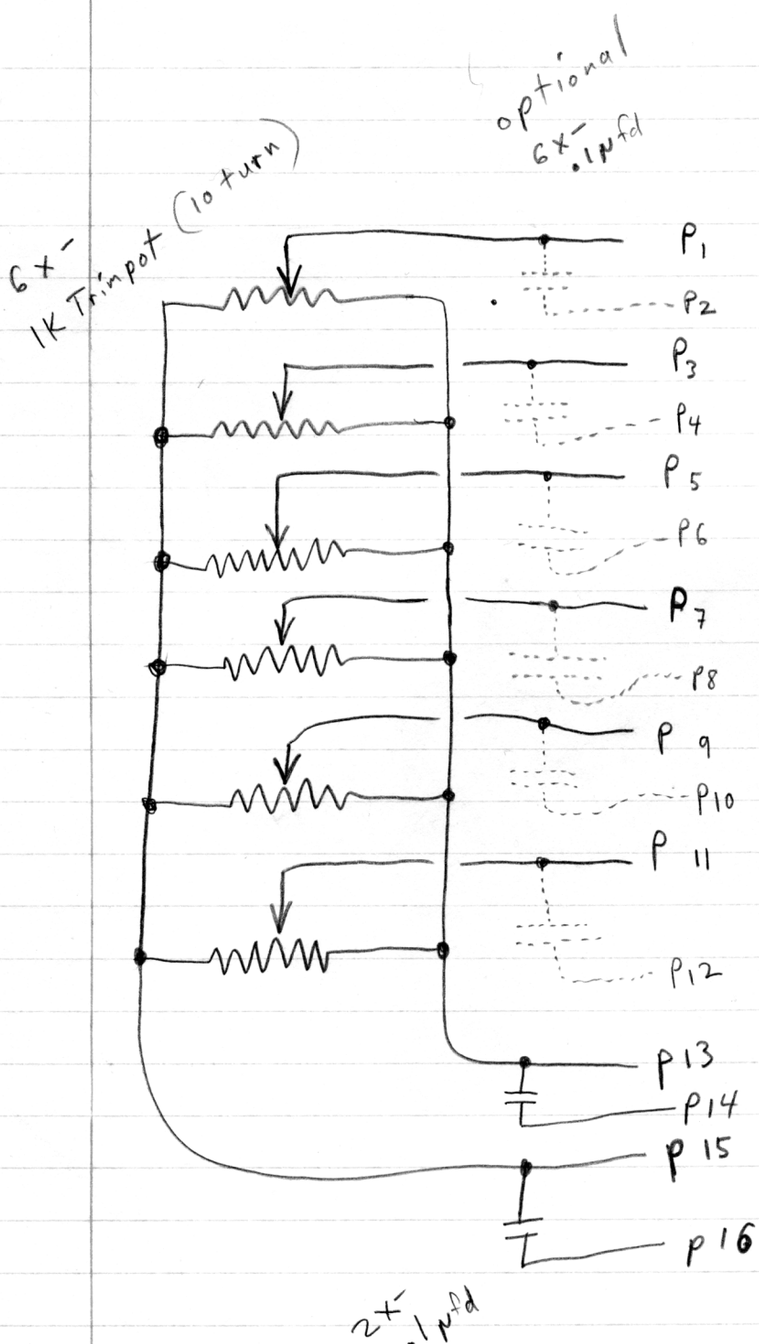




Edge Connector



Engineering Box



O.A.1 parts Count

	without input Amp	"Normal"
10Ω	20	25
75	1	1
100	10	11
220	2	2
390	1	1
510	14	15
560	1	1
750	1	1
1K	4	6
1.2K	1	1
1.5K	14	14
2K	6	6
2.2K	8	8
4.3K	1	1
5.1K	1	2
7.5K	1	1
10K	2	2
15K	1	1
20K	6	8
51K	1	1
100K	4	5

	without input Amp	"Normal"
10p	1	1
.01μ	7	7
.1	15	17
22	6	6
100	9	15
IN4148	1	1
IN270	0	2
LH0002CH	1	2
CD4051N	1	1
2N3904	17	18
2N3906	4	5
16 pin socket	1	1
20 pin "berg" connector (male & female)	1	1

O.A. 1 parts list

(*)	R_1	20K	R_{21}	100	R_{41}	510	R_{61}	510
(*)	2	20K opting 2	22	510	42	1.5K	62	510
(*)	3	1K	23	2.2K	43	1.5K	63	10
(*)	4	20K ~~100 - Mod 1~~	24	2.2K	44	100	64	1K
(*)	5	~~5.1K~~ 100	25	100K	45	10	65	1.5K
(*)	6	10	26	100K	46	10	66	1.5K
(*)	7	10	27	100K	47	510	67	1.5K
(*)	8	100K	28	100	48	1.5K	68	100
(*)	9	5.1K	29	10	49	1.5K	69	1.5K
(*)	10	510	30	220	50	100	70	100
(*)	11	10	31	220	51	390	71	10
(*)	12	10	32	510	52	2.2K	72	1.5K
(*)	13	1K	33	510	53	10	73	1.5K
(*)	14	10	34	10	54	2.2K	74	510
	15	2.2K	35	10	55	1150Ω	75	100K
	16	2.2K	36	1.5K	56	561Ω	76	51.2KΩ
	17	510	37	1.5K	57	10	77	7.5K
	18	100	38	15K	58	530Ω	78	100
	19	10	39	10K	59	2.2K	79	10
	20	10	40	100	60	2.2K	80	10

(*) = for input Amp section

R 81	1K	R 101	2K	* D 1	~~1N270~~		
82	100	102	20K	* 2	1N270	Q 16	2N3904
83	~~1.5K~~	103	2K	3	1N4148	17	"
84	~~1.5K~~	104	20K			18	"
85	5.1K	105	2K	* IC 1	LH0002	19	"
86	4.3K	106	20K	2	CD4051	20	"
87	510	107	2K	3	LH0002	21	"
88	10	108	20K			22	"
89	1K	109	2K	* Q 1	2N3906	23	"
90	10K	110	510	* 2	2N3904		
91	750	111	510	3	"		
92	510	112	10	4	"		
93	10	113	10	5	"		
94	1K	114	75	6	"		
95	10			7	"		
96	10			8	2N3906		
97	10			9	"		
98	20K			10	"		
99	2K			11	2N3904		
100	20K			12	2N3906		
				13	2N3904		
				14	"		
				15	"		

* = ~~for~~ input Amp Section

	C_1	C_{21}	C_{41}	EC_1
1	100	100	100	⏚
2	100	.1	100	
3	100	.01	.1	+5
4	100	.01	.1	
5	.1	10p	100	-5
6	100	100	100	
7	100	.1		ped. pot
8	.1	.1	P_1 Burst level	ped. mini
9	.01	.01	2 ⏚	Video in +
10	.01	.1	3 Burst centering	Video in -
11	.1	.1	4 ⏚	gain pot
12	100	.1	5 Sync level	gain mini
13	.1	.1	6 ⏚	input offset
14	.1	100	7 output centering	B.F
15	.1	22	8 ⏚	Sync
16	.01	22	9 Black clip	Blanking
17	.01	22	10 ⏚	Sync, B.F, B.L. ⏚
18	.1	22	11 input offset	S.C. -
19	100	22	12 ⏚	S.C. +
20	.1	22	13 +5	output ⏚
			14 ⏚	output
			15 -5	⏚
			16 ⏚	
			17 ⏚	
			18 ⏚	
			19 ⏚ ⏚	
			20	

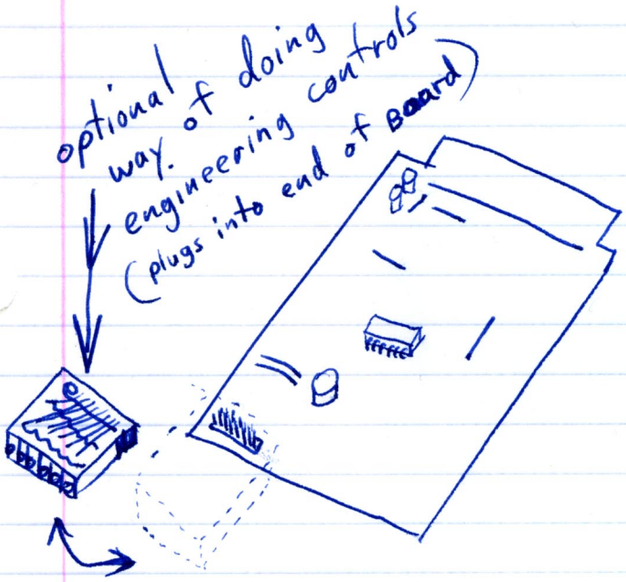
(*) = for input amp section

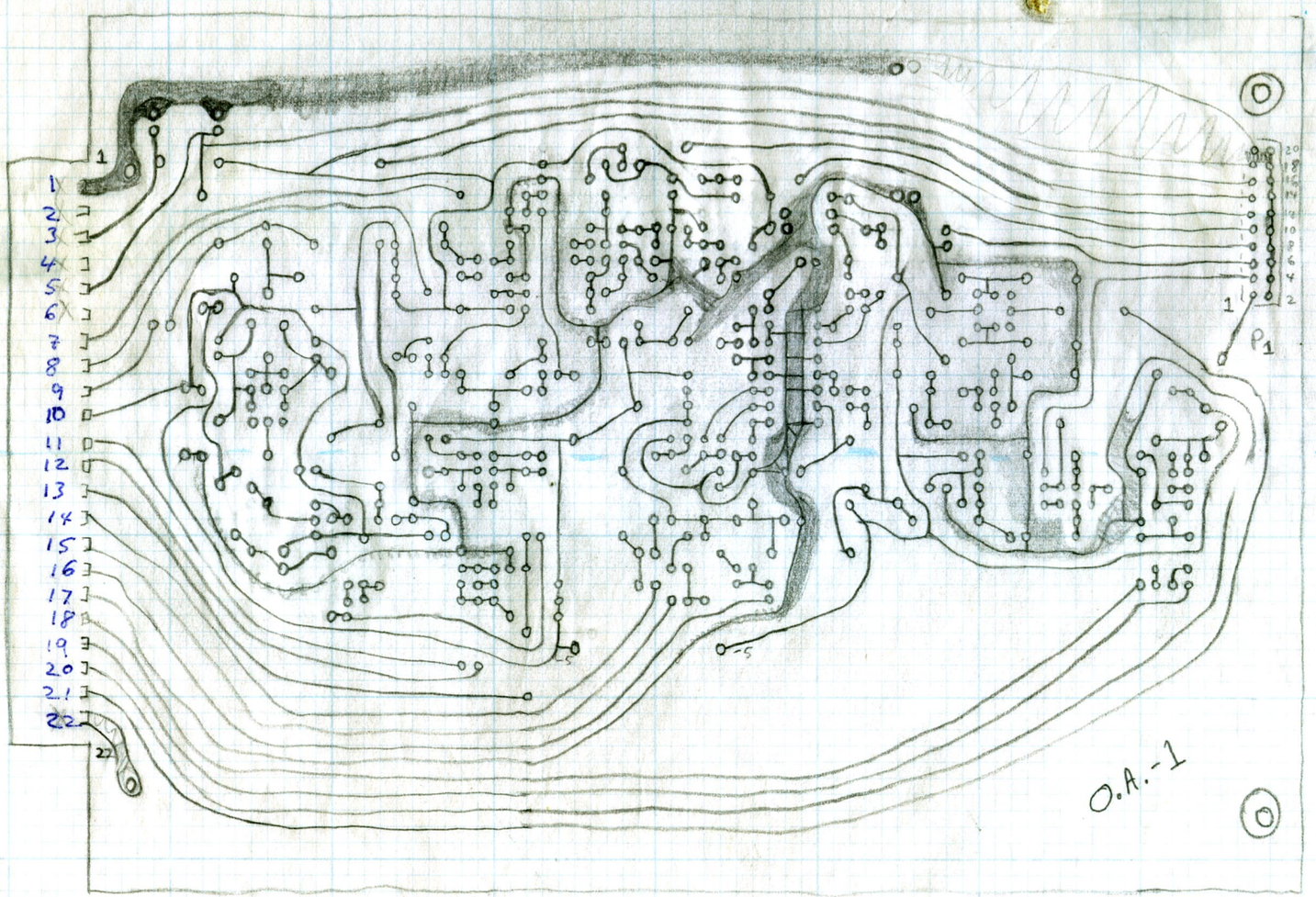
O.A.-1 option guide

"with input Amp" [redacted] $R_1, R_3 \sim R_{114}, C_1 \sim C_{46}, D_1 \sim D_3, IC_1 \sim IC_3, Q_1 \sim Q_{23}$

"without input Amp" $R_{15} \sim R_{114}, C_9 \sim C_{46}, D_1, D_2, IC_2 \sim IC_3, Q_3 \sim Q_{23}$

"for Video input Amp" Move R_1 to R_2
with [redacted] input above +5 DC turn C_1, C_2 around (polarity reversal)


optional way of doing engineering controls (plugs into end of board)



O.A1 9/15/81

9/15/81

Input Amp Section
+5
-5
EC1
P1
O.A.-1
OA1 9/15/81